

Appl. No. 09/904,387
Elcction Dated May 19, 2004
Reply to Office action of April 20, 2004

CLAIMS

What is claimed is:

1. (previously presented) A slide for a gravity slide sorter comprising:

an inclined chute having a chute upper end, a bottom and two sides;

a first support bracket and a second support bracket, said first support bracket and said second support bracket each mounted to a side of the chute, each of said first and second support brackets having an upper edge distal said chute bottom;

each of said first and second support brackets having at least one alignment notch located on its upper edge;

a product guide supported by said support brackets;

said product guide having a guide upper end and two guide sides;

said product guide having at least one guide tab extending from each said guide side;

at least one guide tab receivable in each said at least one alignment notch of said first support bracket;

at least one guide tab receivable in each said at least one alignment notch of said second support bracket;

attachment means attaching said guide upper end to said chute upper end;

said attachment means limiting movement of said product guide laterally in relation to said chute bottom; and

said attachment means allowing relative movement of said product guide normal to said chute bottom.

2. (previously presented) The slide of claim 1 further including:

each of said first and second support brackets having at least one adjustment mechanism;

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each said at least one adjustment mechanism operable to adjust the height of said bracket upper edges in relation to said chute bottom.

3. (previously presented) The slide of claim 1 wherein said attachment means comprising:

at least one elongated pin extending from said chute; and

at least one pin-receiving opening provided in said product guide.

4. (previously presented) The slide of claim 2 wherein said attachment means comprising:

at least one elongated pin extending from said chute; and

at least one pin-receiving opening provided in said product guide.

5. (previously presented) The slide of claim 1 wherein:

the product guide is constructed of a flexible material; and

the product guide flexibly moveable upwardly from the bottom of the chute responsive to forces imparted by a product intermediate the chute and the product guide.

6. (previously presented) The slide of claim 2 wherein:

the product guide is constructed of a flexible material; and

the product guide flexibly moveable upwardly from the bottom of the chute responsive to forces imparted by a product intermediate the chute and the product guide.

7. (previously presented) The slide of claim 1 wherein the chute further includes:

a plurality of channel dividers extending upwardly from the channel bottom; and

at least one of said plurality of channel dividers a different height from at least one other said plurality of channel dividers.

8. (previously presented) The slide of claim 1 wherein:

each said alignment notch defining a notch bottom and two notch edges; and

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the notch edge distal said chute upper end comprising a tapered edge such that the notch opening is wider at the bracket upper edge than at the notch bottom.

9. (previously presented) The slide of claim 2 wherein:

each said alignment notch defining a notch bottom and two notch edges; and

the notch edge distal said chute upper end comprising a tapered edge such that the notch opening is wider at the bracket upper edge than at the notch bottom.

10. (original) The slide of claim 1 wherein the tabs are integral with the product guide.

11. (previously cancelled)

12. (previously cancelled)

13. (previously presented) The slide of claim 1 wherein:

said attachment means comprising at least two pins extending from said chute upper end and at least two pin-receiving openings in said product guide.

14. (previously presented) The slide of claim 2 wherein:

each said adjustment mechanism comprises a slotted opening in one of said first and second support mechanisms and a corresponding screw and threaded opening in a corresponding said chute side.

15 – 26. (withdrawn)